## **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

## WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-019021 Address: 333 Burma Road **Date Inspected:** 15-Dec-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Lv Li Qing No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A Yes N/A **Qualified Welders:** No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** OBG

### **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance(QA) Inspector Mr. Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. The QA Inspector observed and/or found the following:

BAY # 14

### **ULTRASONIC TESTING**

ZPMC NWIT No: 07788

This QA Inspector performed Ultrasonic Testing (UT) of approximately 10% of the length previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an (UT) report on this date. The members are identified as OBG 13AE. The weld designations are as follows:

SEG3007F-038, SEG3007G-046, 047; SEG3007J-036

### **ULTRASONIC TESTING**

ZPMC NWIT No: 07790

This QA Inspector performed Ultrasonic Testing (UT) of approximately 10% of the length previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an (UT) report on this date. The

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

members are identified as Grillage. The weld designations are as follows:

SA7038-036

This QA Inspector randomly observed the following work in progress.

#### **OBG 13EAST**

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066038 performing the Shielded Metal Arc Welding process on weld 203 located at PCMK SEG3011L. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-3G (3F)-Fcm-Repair-1. Weld repair report identified as B-WR17629.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067571 performing the Shielded Metal Arc Welding process on weld 018 located at PCMK SEG3007AD. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-u4b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067609 performing the Shielded Metal Arc Welding process on weld 019 located at PCMK SEG3007AD. ZPMC QC Mr. Lv Li Qing was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-u4b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 052696 performing the Flux Cored Arc Welding process on weld 036 located at PCMK SEG3007AD. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 050242 performing the Flux Cored Arc Welding process on weld 037 located at PCMK SEG3007AD. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 062782 performing the Flux Cored Arc Welding process on weld 079 located at PCMK SEG3007AY. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066359 performing the Flux Cored Arc Welding process on weld 168 located at PCMK SEG3007AY. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 055564 performing the Flux Cored Arc Welding process on weld 250 located at PCMK SEG3007M. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 067079 performing the Flux Cored Arc Welding process on weld 242 located at PCMK SEG3007N. ZPMC QC Mr. Wang Xu was monitoring this

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

welding operation. The welding variables recorded by QC appeared to comply with WPS-B-T-2233-ESAB.

### **OBG 14 EAST**

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 044772 performing the Shielded Metal Arc Welding process on weld 021 located at PCMK SEG3019AY. ZPMC QC Mr. Wang Xu was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-1G (1F)-Fcm-Repair-1. Weld repair report identified as B-WR19107.

This Quality Assurance (QA) Inspector observed erection of the LD3041 was in progress in lift 14 east.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





# **Summary of Conversations:**

No significant conversations were reported on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

Inspected By:	Utekar, Shrikant	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer